

## Worcester

City Hall, Room 103  
455 Main Street  
Worcester, MA 01608  
Phone 508-799-1062  
Fax 508-799-1047

### Board Members

Stephen F. Wentzell (Chairperson),  
Elizabeth A. Early, John F. Mahan,  
Robert V. Stearns, Thomas M. Wade

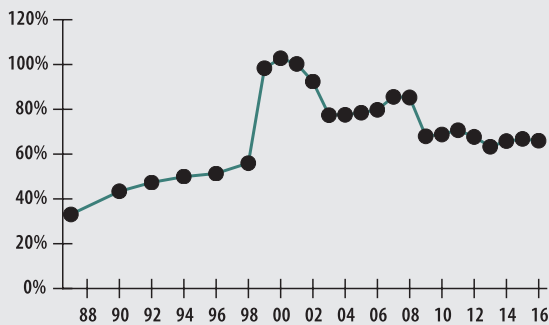
### Board Administrator

Elizabeth A. Early

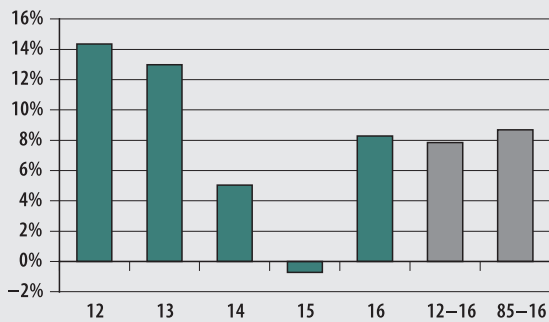
### Board Meeting

Second and Third Thursday of each month

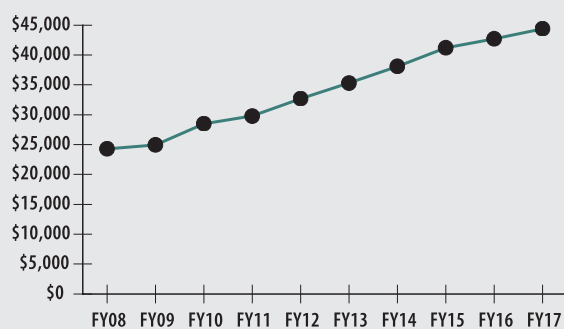
### FUNDED RATIO (1987-2016)



### INVESTMENT RETURN (2012-2016, 5 YEAR AND 32 YEAR AVERAGES)



### 10-YEAR HISTORY OF APPROPRIATIONS (IN THOUSANDS)



### INVESTMENT RETURN HISTORY

#### 32 years 2016

8.69%

#### 31 years 2015

8.71%

#### 30 years 2014

9.03%

#### 10 years 2016

4.66%

#### 10 years 2015

5.30%

#### 10 years 2014

6.38%

#### 5 years 2016

7.85%

#### 5 years 2015

6.06%

#### 5 years 2014

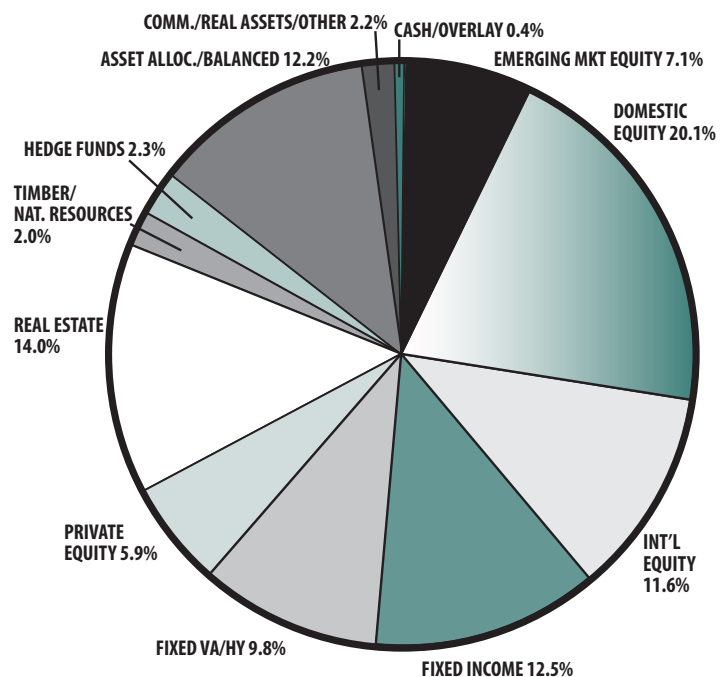
8.99%

## ACTUARIAL

▶ Funded Ratio	66.0%
▶ Date of Last Valuation	01/16
▶ Actuary	The Segal Company
▶ Assumed Rate of Return	7.50%
▶ Funding Schedule	5.85% Total Increasing
▶ Year Fully Funded	2033
▶ Unfunded Liability	\$437.6 M
▶ Total Pension Appropriation (Fiscal 2017)	\$44.4 M

	ACTIVE	RETIRED
▶ Number of Members	3,275	2,722
▶ Total Payroll/Benefit	\$170.3 M	\$75.0 M
▶ Average Salary/Benefit	\$52,000	\$27,500
▶ Average Age	47	NA
▶ Average Service	13.6 years	NA

## ASSET ALLOCATION (12/31/16)



## EARNED INCOME OF DISABILITY RETIREES (2015)

▶ Number of Disability Retirees	320
▶ Number Who Reported Earnings	70
▶ Number of Excess Earners	1
▶ Total Amount of Refund Due	\$26,496.12

▶ 2016 Return	8.29%
▶ 2016 Market Value	\$839.6M
▶ 2012-2016 (Annualized)	7.85%
▶ 1985-2016 (Annualized)	8.69%